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ORIGINAL ARTICLES.

Syphilis of the Eye.

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Read before the Topeka Academy of Medicine and Surgery, April 12, 1897.

Syphilis of the eye is one embracing so many conditions and involving equally the intraocular as well as the extraocular parts that I have taken permission to limit this paper to a consideration of a few of the syphilitic affections of the anterior portion of the uveal tract, especially the iris and ciliary body, with a few clinical notes on illustrative cases.

Specific iritis may manifest itself as a sequence of either hereditary or acquired syphilis. In hereditary syphilis it is usually an attendant of interstitial keratitis, in which form it runs a milder course than ordinary. Although even here, it may also be so acute as to give rise to many of the serious complications of the acquired form.

Iritis from acquired syphilis appears in the second and tertiary periods as early as the second month of general infection, and even as late as twenty or thirty years after. More common, however, between the eighth and eighteenth months. As a secondary manifestation it accompanies the popular eruption and has been called iritis populosa.

Although iritis occurs only in a small percentage of cases in course of syphilis, over 50 per cent. of iritic cases are set down as due to syphilis.

At one time these were advanced pathognomic signs of its specific nature. Now little stress is put in this, for its form and course may assume the most varied character.

Various classes have been made to include its different manifestation, often complex, and often single. This paper will consider only simple specific iritis, gummatous iritis and the common sequlæ cyclitis and irido cyclitis.

Simple iritis has for its most salient points the ordinary symptoms of any iritis, hyperæmia of the conjunctiva, distention of the vessels of the ocular subconjunctiva, pericorneal injection, ciliary neuralgia, a varying haze of the cornea, turbidity of the aqueous, discoloration of the iris with infiltration, a contracted and sluggish pupil, diminution in the acuity of vision a change in the refraction, a contraction of the field of vision, photophobia, lachrymation, and pain.

Hyperæmia of the conjunctiva with a burning, or itching sensation of the eye accompanied by a blurring, or indistinctness of vision may be the first thing that brings a patient to your office. You will likely see the signs of involvement of the iris.

This hyperæmia of the iris obtains at first and is due to an overfilling of the blood vessels. If the process goes on to inflammation this distention increases. An infiltration is observed through the stroma of the iris, along its anterior surface, at its pupillary edge, and especially marked along the course of the blood vessels. This hyperæmia and infiltration produces the discolored iris and the sluggish and contracted pupil. The degree of discoloration will depend upon the color of the iris, the degree of inflammation and the amount of infiltration. The iris loses its luster, is dull, and its fine markings, or crypts disappear.

A blue iris will appear greenish, a brown, a reddish brown. The whole effect will be modified by the condition of the cornea and aqueous. The aqueous will be always more or less turbid. The proliferation of the iris may cause this to such a degree that a deposit in the form of a hypopyon may appear. The haze of the cornea will vary likewise according to the amount of this deposition of exudate on the posterior surface of the cornea. It is always greater with ciliary involvement.

With every iritis there is impairment of the visual acuity. This should hence be taken at the first visit, for it may form a reliable guide in determining the course of the disease. The greater the diminution here, the greater the involvement of the ciliary portion of the iris, and consequently the more serious the prognosis.

The ophthalmoscope will show frequently a change in the refraction of the eye during an attack of iritis, assuming a myopic astigmatism, and in some cases most markedly.

The field of vision is often contracted. The pain in an iritis is usually of a neuralgic type — following along the distribution of the trigeminus. As the ciliary body is more involved, the pain becomes more severe, often excruciating. The pain is always more severe at night.

A form of iritis is described by some authors which they call parenchymatous. In this there are nodular formations found in different portions of the parenchyma, which greatly simulate the true gumma. The adjacent portions of the iris may show only slight inflammation. These nodular masses completely disappear and leave the eye in a normal condition. It is said to be a more common form than the gummatous.

The so-called gummatous iritis appears in the late secondary and in the tertiary periods of syphilis. It is accompanied by all the symptoms of simple specific iritis. In addition there appears one or more small nodular deposits along pupillary border, or in ciliary portions. These masses may attain different sizes and are yellowish in color. They correspond to the gummatous deposits found in other portions of the body. Under specific measures they rapidly undergo fatty change and disappear. The iritic tissue at their situ never regains normal condition. It is bleached out and atrophied, and is usually tightly adherent to the capsule of the lens.

A pure cyclitis is said to be a rather rare condition and often runs a course which shows but few symptoms. The iris may be slightly off color. Pericorneal injection present. The pupil may even be dilated. The pain elicited on palpation of eye in ciliary portion is sharp and severe. While the course of cyclitis may be insidious, its results are very bad, menacing the integrity of the eye. The exudation into the anterior chamber and into the posterior chamber and into the vitreus gives rise to these results: With the exudate into anterior chamber from a cyclitis, we have formed the so-called descemetitis.

The name indicates an inflammation of the posterior lining membrane of the cornea. This, Fuches and others say, is erroneous. It is not an inflammation, but a mere deposition of exudate from a cyclitis. Its presence may later set up an inflammation and cause an organization of this exudate. The peculiar manner in which this deposit arranges itself almost proves its origin. It is found ordinarily triangular in shape with apex pointing toward pupil, the larger particles having gravitated to the lower parts of the chamber, while the smaller float higher and are attached to cornea at or near apex of the triangle.

The presence of descemetitis passes with many authorities as a pathagnomic sign of syphilis. It in itself being an indication of a cyclitis, and the deep cyclitis being here associated with more or less involvement of the whole uveal tract.

Irido-cyclitis is a condition present much more frequently than cyclitis and as the name indicates involves both iris and ciliary body. In all iritic cases there is apt to be some cyclitis, hence some irido-cyclitis, but the name is now properly used only when the symptoms are magnified. The points of differentation then between an iritis and

an irido-cyclitis are only ones of degree. In iritis, as described, the pericorneal injection, the swollen and discolored iris, the small and contracted pupil, the disturbance of vision and sequelæ are not so great, so severe. In irido-cyclitis the pain is very great, exudative masses greater, the injury to the eye much more. The disturbance of vision greater, due to the vitreous opacities formed. The tension is changed. At first increased by total posterior synechia and later lessened by changes in choroid and vitreous, detachment of iris and atrophy of globe.

Diagnosis: Syphilitic iritis in ordinary form can not always be diagnosed. One should endeavor to elicit the presence of syphilitic infection by carefully questioning the patient. If by exclusion other causes can be eliminated, and no history of a specific nature can be obtained, in most cases one can conclude that a taint is present when the disease clears up under mixed treatment. This is not conclusive for there are many cases having no such origin which respond to this procedure. In fact alternative drugs are indicated in a great number of eye conditions when the physician has no idea of striking at syphilis.

A history of recurrent attacks will often direct one. The personal history will often exclude other forms of iritic trouble. Often one is called upon to differentiate between iritis and some other eye disease. A severe conjunctivitis may simulate a mild iritis. The cornea may be hazy; the aqueous apparently turbid, and iris off-color. A little attention even with these may show an actively responding pupil. Iritic treatment would do no particular harm, whereas if strong astringents are applied in iritic conditions considerable harm may ensue.

The use of atropine would help materially. The action of drugs being seen soon in conjunctival troubles and wide mydriasis resulting. The greatest source of error would be to confuse a glaucoma with an iritis, and institute iritic treatment.

The two conditions often present many symptoms in common—the inflamed conjunctiva, the hazy cornea, the discolored iris, the diminution in vision, the neuralgic pain. And often in each condition we must rely on external signs, for a satisfactory ophthalmoscopic examination is out of the question.

Hence great attention must be paid to the few points of dissimilarity; such as the tension, the pupil, the anterior ciliary veins, the field, and the general aspect.

In ordinary iritis the tension is rarely affected, in glaucoma acute, and this is the form being considered, it is always up. In iritis the pupil is small and contracted; in glaucoma it is dilated and sluggish. In glaucoma the anterior ciliary veins are distinctly overfilled, the anterior chamber may be shallow; the cornea is insensitive. In iritis the field may be contracted; in glaucoma it will be found contracted, especially marked on the nasal side.

The pain is more severe and constant than in iritis. In glaucoma you may get the halo appearance. The peculiar glaucomatous aspect may itself lead one aright, especially after an experience with a great number of these cases. Above all, before the use of atropine, glaucoma should be positively excluded.

Prognosis and Sequelæ: The prognosis of iritis greatly depends upon the virulence of the attack. In the usual run of cases, it is favorable, for under treatment the symptoms soon abate. The duration of an attack greatly varies, but one can count on a month to three before the eye is entirely free from irritability. This prognosis also varies according to the extent of ciliary implications and to the kind of complications.

A few posterior synechiæ do no harm. According to amount of exudate, will the number of sequlæ depend. If the iris forms attachments all around, secondary glaucoma is likely to arise. This condition of circular attachment is known as seclusion or exclusion of the pupil. The aqueous in the posterior chamber presses the iris forward, and the pupil has the appearance of a crater-like depression.

If the exudate from whatever source, passes over the pupillary area, the acuity of vision will be reduced to every possible de-

gree. When completely occupying this area, occlusion of pupil exists. The sequlæ arising from it are not so serious as in seclusion, for in occlusion the natural passages for escape of the aqueous are usually open. The two conditions are apt to be present together.

The exudate may cause total posterior synechiæ, and here arises our greatest trouble. Secondary glaucoma will inevitably appear. Satisfactory interference is scarcely possible. The eye passes from bad to worse and soon goes into atrophy.

Treatment:

1. Local.
2. Constitutional.
3. Operative.

As soon as the diagnosis is made the first thing indicated is the instillation of atropine. The severity of the inflammation can be partially measured by action on the iris. The more speedily and the more widely the pupil is dilated the better the prospects.

Often a few instillations will produce wide and satisfactory dilatation and then it can be held here by an occasional use of the drug. This is hardly the rule for it usually requires the frequent use of a strong solution to bring about this result—8 to 16 grs. to the ounce—and in some cases it can be obtained only by even stronger. I have seen the use of one drop of a 24 gr. to ℥i solution in post-operative treatment in the New York Eye and Ear Infirmary. The *cul-de-sac* will retain only one drop and in a high grade of inflammation only a portion of this is absorbed.

Cocaine materially aids the atropine in causing mydriasis and is often used with or alternated with it.

There are at least three special indications for atropine in iritic cases.

1. By causing dilatation the blood is forced from the distended vessels, and the inflammation is held in check. Certainly in being forced from the iris the vessels of the ciliary portion becomes engorged, and in case the inflammatory process has involved this region, the eye must be watched with the greatest care. The atropine may be instrumental here in setting up an increased tension.

2. Atropine puts the inflamed iris in splints as it were. The to and fro motion is stopped.

3. In complete dilatation the iris nowhere touches the capsule of the lens, the dangers of adhesions are avoided, hence the sooner it is employed the better. It also plays an important part in breaking up the adhesions already formed by putting them on a stretch.

In eye work atropine is one of our most valuable drugs. It is greatly abused and often does harm. In glaucoma its effects are most harmful.

Although used so much and with such apparent indifference, its constitutional effects are not seen very frequently. In a hospital service of 20,000 new cases the writer saw hardly half a dozen cases that required any attention, and these arose from the use of hometropine rather than the stronger atropine.

The characteristic flushing with dryness of the throat may be seen often, but cases with marked symptoms of poisoning are rare. A few small doses of morphine will relieve the condition. Hometropine, scopalamine, duboisine, etc., are drugs often used in place of atropine, when atropine can not be tolerated. Each one has its good points, but atropine has no peer in bad inflammatory conditions of the iris.

Heat is an excellent remedy in bad iritic troubles attended with great pain. It may be used as either moist or dry. In the form of hot stypes it is however preferred. The individual case determines the length of time and frequency of its application. Ten to twenty minutes three to five times a day is often sufficient. The patient will usually attend to this most willingly, for it is very soothing.

As everything in medicine is often the exception, experience does not enable one to tell when and where this moist heat will show this result, for cold alone at times does good. Some may be able to tell, but an eminent ophthalmologist told the writer that an experience of nearly forty years often left him in the dark as much as ever.

Blood-letting in medicine is coming to occupy its true place. It is being used again more frequently in well selected cases of pneumonia, nephritis, etc. We will scarcely desire to see its use rival the sanguinary work of the physicians of the latter part of the eighteenth century. Still, it should be used more.

In eye work it has apparently never fallen into disuse, and no one can realize the benefit and relief it gives to a patient suffering with bad iritis, until he has used it. The artificial leech or hourteloup is now employed in preference to the natural, and is applied to the temple, or the tip of the mastoid, more frequently to the temple. From one to three ounces of blood is taken.

Besides relieving pain, in very obstinate cases where atropine will not produce satisfactory dilatation, its use immediately after the leech will produce the desired result. It is often used for this purpose alone.

In recent years hypodermic subconjunctival injections have been used not only to lelieve pain, but also to bring medication as nearly directly to the parts as possible. In some cases it acts most admirably. Various preparations are used. Four to six miniums of a 1-1000 or 1-2000 bichlorid of Hg. solution is preferred. Distilled water or a normal salt often does as well. If the pain is not soon releived after this it was our usual rule to return to some of the ordinary methods.

The eyes should be well protected from the light. In mild cases ordinary coquilles will answer, but in the more severe cases the patient should remain in a darkened room, and often absolute rest in bed is demanded. No attempt at work, especially near work, should be made.

Constitutional Treatment: In secondary syphilis mercury is the drug which first suggests itself to one. In what form shall it be prescribed? This is a question open to considerable reflection. It depends upon the virulence of the attack, the condition of the patient, his station in life, and other considerations. Where one wishes to get a rapid effect, to get patient under the mercury as quickly as possible nothing is better than the dirty inunction. A drachm of the strong ointment may be used night and morning, choosing different portions of the body for its application. Although irritation may arise in some cases, the writer found that to make these applications to the abdomen alone, covering it from pubis to the sternum and extending half way round the body, yielded more satisfactory results than any other method. One application after another were made over the same place. A flannel binder was used to protect the clothes. This ointment was allowed to remain until treatment was discontinued. and it was then thoroughly washed off. Nothing pleased one more than to see a good thick coating.

Often while inunctions were used bichloride was given internally in doses of 1-24 to ⅛ thrice daily. This may seem heroic, but results justified the treatment. Only one case was thoroughly ptyalyzed, and this patient had been so only a short time before coming under our treatment.

The protiodide of Hg. in doses of ¼ to ⅓ of a grain thrice daily is used. This dose being increased daily until constitutional effects are manifested.

The biniodide is used as the bichloride. Calomel in gr. 1-10 to ¼ guarded by opium is often desirable.

Hypodermic medication in form of bichloride of Hg. has yielded good results in eye cases, injections being made under ocular conjunctiva or in corresponding temple.

After a mercurial course either mixed treatment or potassium iodide is kept up for some time.

In gummatous iritis K.I. in increasing doses is indicated, and it is often necessary to carry the drug to the highest limit. I have seen a ℥i. given three and four times a day.

In chronic iritis and some selected acute cases, the old Carmichael treatment is often employed: that is, the use of turpentine. The old dosage of ℥i thrice daily hardly holds today, but in doses of 5 to 20 minims is often very good. That it is a nauseating remedy—especially when given in emulsion

or otherwise than in capsule—no one will dispute. The urine must be watched most carefully. An excellent treatment for old uveal conditions is a prolonged use of HgCl gr. 1-20 and ext. belladonna gr. 1-10 t.i.d. Dover's powder and pilocarpine have an established place in the treatment of iritic as well as general eye conditions.

Operative Treatment: Posterior synechiæ often produce an irregular pupil, but seldom cause recurrent attacks. Still various operations are made to relieve the attachments. The operation, or corelysis, is occasionally performed. The late Dr. Keyer devised a corelytom which worked very nicely. After making small incision in periphery of cornea with Knapp's or Hay's knife needle, this corelytom was introduced and carried under pupillary edge of iris and then swept around entire border of pupil, freeing all adhesions. In his skillful hands it worked nicely, but there is great danger of causing a traumatic cataract by disturbing the capsule.

Passavant's spoon-shaped forceps have been used for same purpose. The same danger arises in their use. In seclusion of the pupil an iridectomy is demanded, and if no other reasons contraindicate, it is made directly up. If occlusion with seclusion is present, then the iris is often removed in, or down and in, in order to secure a more serviceable pupil. In secondary glaucoma the tension should be relieved. If arising from cyclitis, the use of eserine, a paracentesis corneal, or an anterior sclerotomy may be satisfactory in their results, but in the majority of cases a broad peripheral iridectomy should be made. It must be peripheral. The best method to follow in this is to tear the iris away. That is, after making first snip with scissors, up and in, tear the iris outward to the desired extent and excise tissue drawn tightly up and out by another snip of the scissors. This is followed by less hemorrhage than in those cases where the iris is cut entirely by scissors, and makes a truly classical peripheral iridectomy for glaucoma.

CASE I. *Syphilitic Iritis in Both Eyes*—E. F., female, aged 26, married; admitted for treatment June 6, 1896, presenting following appearance: She was a frail, poorly nourished, anemic woman. Was nursing a puny, pale baby about three months old. The face, body and limbs of the mother were covered with secondary eruptions. The child was carefully examined and no signs of syphilis found. The infection must have occurred after birth of child.

Both eyes were affected and presented the usual signs, especially marked. Intense hyperæmia of ocular and palpebral conjunctiva, great ciliary injection, a hazy cornea, rather turbid aqueous, infiltrated, discolored irides, bound down all around; pupils small and contracted. Vision scarcely better than light perception. General treatment consisted of rest in bed, tonics, and inunctions of mercurial ointment ℥i b.d. Local treatment, frequent instillations of atropine and cocaine.

June 24: Eruption has disappeared. Patient shows some constitutional effects of mercury. Eyes have greatly improved. Ciliary injection still marked.

July 10: Eyes still quieter. Some ciliary injection remaining in left eye. Pupils fail to dilate. Iris bound down all around. Exudate in pupillary space. Vision practically *nil.* Eye in general uveitis.

July 14: Discharged to have an iridectomy later.

CASE II. J. M., female, aged 19, single; a small, ill-nourished girl; was received for treatment September 15, 1896, suffering from specific iritis in the right eye. The usual symptoms were present. On admission pain was so severe that artificial leech was applied and hypodermic subconjunctival injection of normal salt solution was given. Atropine and cocaine were used freely at the same time. Mercurial inunctions were begun, but in three days patient was ptyalized. The initial lesion had appeared on nipple about four months previously—infection from a syphilitic inmate of a disreputable house.

Eye cleared up most rapidly. No sign of synechia remained. After several months of tonic treatment patient presented a very different appearance from one on admission.

CASE III. *Acquired Interstitial Keratitis*

with Specific Iritis—M. M., female, aged 18, grass widow; came under observation July 27, 1896. No hereditary specific history obtainable, although eagerly sought, as the case presented marked signs of interstitial keratitis. The right eye showed interstitial keratitis and specific iritis. The left was quieter, but under atropine showed old synechiæ. Her vision at age of 16, at time of marriage, was good. Subsequently had severe attack of inflammation in left eye. Came to us with similar condition of right eye. Vision was greatly reduced. Patient could scarcely get about alone. Mercurial inunctions were begun, and as soon as its effects became manifest potassium iodide and bichl. were substituted. Improvement was slow. The irides were kept dilated with great difficulty even under leech and strong atropine solution.

September 30 patient was discharged. Eyes have quieted down nicely and visual acuity greatly increased.

CASE IV. *Irido-Cyclitis of Both Eyes*—D. M., male, 55 years old, widower, miner; struck in O.D. with piece of steel March 10, 1896, causing prolapse of peripheral portion of iris up and out a little back of cornea-scleral border. Came under observation April 1, 1896, presenting the following condition on examination: Right eye—Lids normal, conjunctiva seat of chronic catarrh, ocular conjunctiva greatly injected, up and out; remnant of old injury scarcely visible; chamber very shallow; iris off color, pupil small and bound down all around, pupil occluded, tension plus. The left eye showed similar conditions.

April 22d an iridectomy was made on left eye while it was still greatly inflamed. The wound closed and eye healed nicely.

June 8th, similar operation on right eye. Operation smooth, result apparently very good. Anterior chamber resumed normal depth.

October 14, patient has been away for the summer. The eyes, regardless of the operative interference, have progressively grown worse; tension is at least minus two; atrophy showing. Patient practically blind. This case shows No. I, only more advanced.

CASE V. *Gummatous Iritis*—H. W., male, 29 years old; admitted April 1, 1896, with history of initial lesion two years previously. Right eye showed usual signs of specific iritis. Pupil under atropine dilated one-half ad maximum. Up and in on pupillary border there can be seen a small tumor, of a yellowish brown color, size of a large shot. At lower pupillary margin a second one is seen which nearly embraces the lower half of pupillary circumference. Patient was put on increasing doses of potassium iodide, beginning with 10 grains. Atropine used locally.

April 4: Upper gumma gone; lower one much lessened; pupil more dilated.

April 23: Eye quiet; pupil irregular; iris darkened and atrophic at seat of gummata, and showing strong synechia here.

CASE VI. *Gummatous Iritis of Right Eye with Hypopyon*—J. A., male, age 23; admitted for treatment August 6, 1896. Right eye shows marked conjunctival inflammation, a discolored and contracted pupil. Pupil small, round and central. Situated down and in at pupillary border there is a small, yellowish tumor about size of a grain of rice. This stands out anterior to level of the iris. Distinct history of initial lesion 18 months ago.

Treatment: Hot stypes, atropine, inunction of mercury ℥i once daily, and K.I. 10 grains thrice daily.

August 16: Iris has dilated nicely except at site of gumma. Gumma has absorbed. Iris bound down to capsule line.

August 24: Discharged. Eye quiet; iris good color; strong adhesion down and in.

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THE next meeting of the State Society will be held in Hamilton Hall, rather than at the State House.

Chloroform and Ether Anesthesia.

BY C. O. CRANSTON, M.D., COTTONWOOD FALLS, KAS.

You who are called upon to perform surgical operations are frequently confronted with the question of the choice of the anesthetic. Some prefer and use ether in all cases, while others use only chloroform.

Generally speaking, chloroform should be used in all operations on children under the age of five or six years. In operations about the head, face and neck, and for all those who are suffering from chronic, renal or pulmonary diseases.

Ether should be used for old people, and those with a weak or diseased heart, and those suffering from severe shock.

The reason for making this discrimination is deduced from the effect of the two agents on the system. Chloroform produces cerebral anemia, by contracting the blood vessels, while ether has the opposite effect, like the nitrates, dilates the capillaries and small vessels, not only of the cerebrum, but of the whole system.

The immediate mortality of the two is greatest in chloroform. Chloroform is immediately fatal, if at all. After you get your patient off the table you need have no apprehension as to the result of the anesthetic. While with ether your chances for getting him off the table is very good; but he is apt to develop renal or pulmonary inflamations and die, a year or so after, as a result of the visitation of the ether on the mucous surfaces.

Therefore, if those cases of renal and pulmonary diseases that prove fatal, which were superinduced by the ether as an anesthetic, were gathered up and placed on its mortality roll, I have no doubt that the percentage would be much greater than that from the use of chloroform.

The apparently great mortality from the use of chloroform is due I think largely to carelessness, or inattention to the prominent symptoms, by the anesthetist.

It is in country practice very carelessly administered. As giving it on a folded towel, or poured on absorbent cotton stuffed in the bottom of an inverted cup or tumbler.

It should be given largely diluted with air, shouldn't have over 10 per cent. chloroform vapor. This can be done with safety and certainty by the aid of a mask covered with gauze thin enough to allow free access of air, and a small bit of absorbent cotton at apex to arrest the drops of chloroform. The chloroform should be given continuously, 60 to 100 drops per minute. This will allow the patient to go under the anesthetic gradually, producing cerebral anemia resembling physiological sleep. The practice sometimes adopted of dashing on a quantity of chloroform, waiting until it evaporates, then repeating, is very dangerous when the patient is near the stage of profound anesthesia; and during the stage of excitement, this stage is intensified by this procedure.

If given gradually this stage is shortened, and at times hardly perceptible. In administering it be guided by the pupil and the respiration.

Never mind the heart, as long as a man breathes you may rest assured his heart is acting.

The pupil at first contracts slightly, then dilates, due to stimulation of the pupil dilating center. The chloroform then reduces the excitability of this center and following excites the pupil contracting center. Then should the anesthetic be pushed. Paralysis of the contracting center is apt to be produced when the life of the patient is in danger.

Never push the choloroform beyond the *pin hole* contraction of the pupil—this is the stage of profound anesthesia.

In trying to hold at this stage the pupil is apt to dilate either in passing beyond this stage or in the opposite condition (in returning consciousness) and here you must judge by the condition of the patient and the amount of chloroform you are giving which way he is going.

Always have your patient in the horizontal position, or better still have head lower than the body, as this, through gravity, favors the flow of the blood to the

brain and counteracts to a certain extent the effect of the chloroform. It prolongs the process, but is much safer; therefore never give chloroform in a dentist's chair unless it is so arranged that the head can be instantly lowered, and lower the head before beginning the anesthetic. If, from any cause, an anesthetic must be given in the upright position, better choose ether.

Chloroform is much the nicer of the two to use. It requires but a small amount. The post-anesthetic sickness and vomiting is not so marked, and very frequently not present at all. And if properly administered, in such cases as possess no contra-indications, is I think, no more dangerous than ether.

Focal Epilespy.

American Journal of Surgery and Gynæcology.

Drs. B. Sachs and A. P. Gerster, of New York, after a careful study of the subject of focal epilepsy, draw the following conclusions:

1. Surgical interference is advisable in those cases of partial epilepsy in which not more than one or, at the utmost, two years have elapsed since the traumatic injury or the beginning of the disease which has given rise to the convulsive seizures.

2. In cases of depression or other injury of the skull, surgical interference is warranted even though a number of years have elapsed; but the prospect of recovery is brighter the shorter the period of time since the injury.

3. Simple trephining may prove sufficient in a number of cases, and particularly in those in which there is an injury to the skull or in which a cystic condition is the main cause of the epilepsy.

4. Excision of cortical tissue is advisable if the epilepsy has lasted but a short time, and if the symptoms point to a strictly circumscribed focus of disease.

5. Since such cortical lesions are often of a microscopic character, excision should be practised even if the tissue appears to be perfectly normal at the time of operation; but the greatest caution should be exercised in order to make sure that the proper area is removed.

6. Surgical interference for the cure of epilepsy associated with the infantile cerebral palsies may be attempted, particularly if too long an interval has not elapsed since the beginning of the palsy.

7. In cases of epilepsy of long standing, in which there is in all probability a widespread degeneration of the association-fibres, every surgical procedure is useless.

Schleich's Fluid in Operations on the Cervix.

Medicine.

The happy effect of this fluid in preventing pain in patients unable to take an anesthetic is well illustrated by Dr. S. D. West, of Philabelphia, who reports a case in the *Medical and Surgical Reporter.* By the injection of half a drachm into both the anterior and posterior lips of the cervix he secured complete local anesthesia in twenty minutes, the patient being very feeble and nervous and having absolutely refused ether. The operation was performed for the relief of symptoms caused by a severe bilateral laceration of the cervix, both lips being greatly enlarged, indurated, everted, and covered with exuberant granulations extending up to and involving the endometrium.

The chief discomfort of the operation was due to the dragging sensation caused by the tension in holding the uterus in a position necessary for the surgical treatment.

Primary union followed; the sutures were removed on the fifth day, and on the seventh day the patient was sent to the sea-shore for the season. She wrote Dr. West a few days later, saying that "she was getting along very nicely."

The freedom from pain during the operation, the ease with which the operation was performed, the absence of nausea and vomiting consequent upon the use of the anesthetic, and the prompt union of the parts, is the Doctor's apology for reporting so common and every-day an occurence. He says that in the future he will use more Schleich's fluid instead of ether in the repair of lacerations of the cervix.

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Topeka, Kansas, Saturday, April 24, 1897.

Medical Information for the People.

The importance of educating the general public in matters medical is clearly apparent to those who are brought in contact with all classes. The ignorance which is met, among some of the better classes even, in regard to the nature of diseases, their seriousness and their care, and the utter lack of knowledge of even the elements of hygeine, is convincing that some steps should be taken to bring the people up to a higher standard on general medical subjects. When the people are better informed in regard to medical subjects there will be less need for laws regulating the practice of medicine, and the boards of health will have less difficulty in enforcing quarantine measures and other regulations for the prevention of disease.

Some of the metropolitan daily papers have recognized something of the prominence these subjects might take, and have engaged medical writers. In some instances the articles written have been intended for the general good and have been instructive; but in too many instances the columns of the paper have been used for self advertisement, and the instructive features lost sight of. The public lecturer often gives his audience facts of much importance; but with the majority of such men the most essential features are minus, *i. e.*, an honesty of purpose and a true presentation of facts. It has been suggested that open or public meetings should be held where subjects of interest might be discussed by members of the profession. It is doubtful if such a plan would be of benefit either to the public or the profession.

There is a certain number of people who are persistent readers of everything they can find touching upon medical subjects, and, as a consequence, many of them fall victims to the misrepresentations of the quack advertisers. Many such books are on the market which should be suppressed on account of the glaring falsehoods they contain. If a reliable book written by men of well known standing in the profession, covering the subjects upon which the people should be better informed, could be placed upon the market at a reasonable price, many of the present medical fallacies would soon disappear.

THE program for the Kansas Medical Society has now all been turned over to the committee on program, and as soon as it is properly arranged will be issued.

THOSE who wish to have exhibits at the State meeting should address Dr. Ida C. Barnes, Topeka.

St. Louis and other cities have followed New York in declaring pulmonary tuberculosis infectious, and ordering physicians to report all cases coming under their care.

Eastern Kansas Medical Society.

The evening session of the society was called to order in Odd Fellows' Hall, Kansas City, Kansas, with L. Reynolds, M.D. in the chair. Dr. Lane was appointed secretary *pro tem*. The minutes of the previous meeting were dispensed with, as also the calling of the roll. A board of censors *pro tem* was appointed by the chair, and a favorable report of the following applications for membership was made: John L. Fryer, Kansas City, Mo.; P. D. Hughes, Ft. Leavenworth, Kas.; J. L. B. Eager, Kansas City, Kas.; R. A. Roberts, Kansas City, Kas.; Earnest J. Lutz, Kansas City, Kas.; E. L. Harrison, Kansas City, Kas.; Jno. A. Mitchell, Kansas City, Kas.; C. M. Stemen, Kansas City, Kas.; E. R. Tenny, Kansas City, Kas.

On motion, the discussions were limited to five minutes.

Dr. Glassock reported the following case:

"Albuminuria of Pregnancy"—Case had not been seen prior to the eighth month, there was then edema of the lower limbs. Did not know then if there was any trouble prior to this time. At the eighth month there was decided albumen in the urine. On test with heat and nitric acid there was complete coagulation. Several remedies were tried with little or no effect. The edema increased in spite of any remedies administered and continued up until after labor. As to the cause of albuminuria of pregnancy there are a number of theories. One of the earlier theories was the pressure upon the blood vessels, but this does not explain the condition. Another theory is that it is due to the effete material disturbing the kidney and setting up an acute nephritis. Labor came on in this case about two weeks before full time. About this time there was double vision, and she was threatened with convulsions. She was given a large dose of hunjadi water. Several actions of the bowels resulted, and soon labor came on. The labia were edematous, and had to be punctured. Labor was completed. During the twenty-four hours preceeding delivery only two ounces of urine was passed. Veratrum viride was used to control the tendency to convulsions. In a week after delivery the edema had entirely disappeared, but there was still a trace of albumen and some casts for ten weeks afterward. I am led to believe that the albuminuria of pregnancy is not likely to be followed by Bright's disease though the Bright's disease may exist prior to pregnancy, and in these cases of course would continue. The edema is due to the conditions of pregnancy rather than the condition of the kidney.

Discussion—Dr. Lane: The remarkable thing about this case is that the woman and baby lived. It is not safe to let a case like this go to full term. I am opposed to the use of veratrum viride. I prefer heroic methods in such marked cases.

Dr. Fryer: The doctor reports the presence of double vision in this case. In these cases which occur before the seventh month there is usually death at delivery or blindness afterwards. Where we have a lesion in the retina in these cases we have usually interstitial rather than parenchymatous inflammation. I think it is dangerous to let these cases go on.

Dr. Munn: I imagine the doctor investigated the execretions in this case from time to time, and found the kidneys capable of doing their work. I am of the opinion though that the gentlemen are correct in saying that premature labor should usually be produced.

Dr. Hughes: I think the production of premature labor is the only treatment in these cases.

Dr. Powell: If the kidneys have been all right prior to conception I would prefer the conservative method.

Dr. Glassock said in closing: The casts found were hyaline casts. The amount of urine excreted was normal, or nearly normal, up to one or two days before labor, then the amount diminished very rapidly. The rule seems safe to follow that as long as the kidneys do their work, and it is near the full term, it is safer to wait than to produce

premature labor, which may cause considerable trouble.

Dr. Mitchell reported the following case: A woman twenty-eight years old, the mother of three children. Two years ago there appeared considerable swelling in the feet, ankles and lower limbs. There was pain in the limbs which extended up in and into the back. Finally a tumor appeared in the epigastric region. Two months ago she complained of shooting pains in the tumor. There has been nightsweats. She has putty colored stools part of the time. Urine is quite dark with sp. gr. 1012.

The case was presented and the members of the society were asked to examine.

Discussion — Dr. Lane: In this case there seems to be an obstruction of the gall duct, and some enlargement of the liver from distention of the gall bladder. I think if she does not improve it would be advisable to operate.

Dr. Hughes: I don't think this is a gall bladder trouble, but that the woman has had an abscess in the liver and there is induration

Dr. Fryer: As a diagnostic means I would suggest that if there is an abscess there would be leucocytosis, there would be symptoms of sepsis, but these would occur also with impaction of the gall bladder. With impacted gall bladder there is interference with the pancreas and fat necrosis. Would advise counting the blood corpuscles.

Dr. Cornell: The case looks to me very much like a syphilitic gumma. There is no definite history of syphilis except that her mother had it.

Dr. Tenny: I was unable to detect the gall bladder. I think it is a case of congestion of the liver from malaria.

Dr. Lane: I think I could trace the enlarged and indurated liver down to the gall bladder which I think I detected.

Dr. Mitchell: I first thought it was an impact gall bladder, then I was convinced that the tumor was too superficial to be the gall bladder. I am satisfied it is not an abcess. If it is not the gall bladder I am satisfied it is the fibroid tumor.

Dr. Lutes reported a case of "Death from Placenta Previa": A post-mortem was held and beside the placenta previa on further investigation was found a degenerated ovary, in which was found a large number of streptococci. The specimen was presented for examination.

Dr. Eager read a paper on "Bacterilogical Diagnosis." (Published.)

Discussion — Dr. Lane: Examination of sputum is not always the first way we find tuberculosis of the lungs. Localized areas of tubercular disease are not shown by excretions. The injection of Koch's lymph would decide it earlier. It is the exception that the bacilli are found in the serous fluid of a tuberculous joint. It is not practical to make diagnoses by the germs found in the blood, especially by the general practitioner. It is tedious and difficult.

Dr. Lutes: I have examined 267 cases of so-called malaria, and only found the plasmodium ten times. They were all treated with quinine and tonic, and all recovered. The typhoid bacilli are very difficult to find unless you puncture the spleen. In diphtheria the microscope will not prove the diagnosis, and the culture method is very difficult.

Dr. Thompson: It requires an expert to use a microscope properly, and a greater expert to properly stain the specimen.

Dr. May reported a case of "Eczema of the External Auditory Canal."

Drs. Fryer, Lane and McVey were appointed nominating committee. Committee reported as their recommendation for officers for the ensuing term for president, W. S. Bunn, Lawrence; vice-president, J. W. May, Kansas City, Kas.; secretary, J. L. Gilbert, Topeka, Kas.; treasurer, D. K. Longshore, Topeka. Next place of meeting, Leavenworth.

The doctors of Yarmouth, Eng., in charge of the benefit associations, lately made a strike for higher pay. The associations combined and started an office of their own, thus beating the doctors.

South Kansas Medical Society.

The Spring meeting of the South Kansas Medical Society will be held in council chamber of city hall, Wichita, Kansas, Tuesday, April 27, 1897. Sessions: 11 a.m., 2:30 and 7 p.m.

PROGRAM.

1. Fevers of 1896 — Dr. H. D. Hill, Augusta, Kansas.
2. Report of Case — Dr. J. N. McCay, Pratt, Kansas.
3. The Injection Treatment in Hernia — Dr. J. T. Axtell, Newton, Kansas.
4. A Paper — Dr. H. G. Welsh, Hutchinson, Kansas.
5. Heart Lesions — Dr. J. R. McCluggage, Douglass, Kansas.
6. A Paper — Dr. J. E. Oldham, Wichita, Kansas.
7. Clinics.

Treatment of Eczema.

Medical Standard.

Dr. O. Peterson gives the following considerations:

1. Classification of Eczema — acute, chronic, relapsing.
2. Period of development of the skin.
3. Condition of nutrition of the skin.
4. Hygienic surroundings and occupation of the patient.
5. The nervous system and its irritability.
6. The digestive and sexual organs.
7. Ability of the patient to apply treatment intelligently.

In acute and subacute attacks, refrain from irritants. In drying the skin and reducing the secretion, use a zinc paste, as follows: —

Zinci oxidi
Pulv. amyls, aa, 1 part.
Ung. petrolei, 2 parts.

M. et Sig.— Apply twice or thrice daily with a glass rod, and cover with a thin layer of hygroscopic wadding.

For cleaning away this application use almond oil, with or without 1 per cent. carbolic acid dilution. If there be a strong tendency to separation, so that the paste adheres poorly, use 1 to 2 per cent. acetate of lead in vaseline, with addition of talc, 2 parts to 4 or 6 of vaseline. One to 3 per cent. alum, vaseline, talc salve is also good.

If blisters and secretion are diminished, but the skin still soft, a protective may be made of zinc gelatin: —

Zinci oxid.
Gelatin, aa 15.0
Glycerin, 25.0
Aquæ dist., 45.0

M. s.a. et Sig.— Stand the box of gelatin before use in a bottle of hot water, and when dissolved apply with a glass rod. In about ten minutes a film is formed, which permits cleansing about the sore. In hairy or tender parts of the body the paste cannot be used, and then white precipitate ointment or lead ointment may be applied.

For chronic eczema, hydrotheraphy, in the form of local or general baths or hot compresses. For topic eczema with desquamation, tar ointment is useful.

Internally, besides general treatment, sodium salicylate and salol are recommended.

Changes in Milk from Boiling.

National Medical Review.

Some years ago a manufacturing house consulted us with reference to the question of putting on the market a preparation of dessicated blood. The theory they proposed to advance was that they could procure fresh bullock's blood, dry it rapidly, and in this condition offer it to the profession. When this dried blood was administered it was supposed that the red blood corpuscles would pass readily into the circulation, would there become "re-vitalized" and thus added to the number of red corpuscles in the system. Of course, it does not take very long for us to decide such a question. We said that we did not even believe it possible that the red corpuscle of dried human blood would again enter the

circulation as such. They would have to be digested the same as any other substance of similar composition.

But a recent number of the *British Medical Journal* contains an article which is about in keeping with this idea of the actual transfer of red corpuscles from one animal to another. The writer strongly objects to the boiling of milk, "Because," he says, "it kills the living cells which are so abundant in fresh milk." He declares that when fresh milk is taken into the stomach "these living cells are at once absorbed without any process of digestion and enter the blood stream and are utilized in building up the tissues." If the milk be boiled these living cells must then be digested before they can be taken into the system. He puts it in this way: Living cells of fresh milk are living masses of protoplasm which go directly to the building up of tissues; but if the milk be boiled then you are giving dead matter which must be acted upon as any coagulated albumen. Fresh milk gives vitality to infants because there is so much living matter in it, while boiled milk is only so much ordinary food.

It hardly seems possible that such nonsense can be afflicted upon the medical profession, and yet we have it presented to us in an elaborate artlcle in the leading medical journal of Great Britain. One would think that the author must have observed the oil globules of milk through a microscope for the first time just prior to writing his article, and that seeing these bodies floating about in the field he became wonderfully impressed with their "vitality." Nearly a year ago we had occasion to consult authorities on the question of the relative digestibility of fresh milk and boiled or sterilized milk. We were surprised at the large number of eminent authorities who declared that boiled milk was even more digestible than raw milk, many held that it was equally as digestible, and scarcely one thought its digestibility injured.

Wanted: To correspond with competent Physicians who desire a good location for the practice of medicine. Address with stamp, F. M. SHIPPEY, Waterloo, Iowa.

Case of Tuberculosis Cured by Cancrum Oris.

Hunter McGuire, M.D., LL.D., Professor of Clinical Surgery. In the By-Monthly Bulletin of the University College of Medicine, Richmond, Va.

Miss P., of Abingdon, Va., was brought to my private hospital, November 9, 1895. She had a hacking cough, enlargements of the glands of the neck, and consolidation of the apex of one lung. I diagnosed phthisis pulmonalis, prescribed constitutional remedies, and advised her being taken to some more suitable climate for the winter.

Before she could make arrangements to leave the hospital she had a severe chill, followed by high fever and a very sore throat. In a few days she developed a typical case of noma, or cancrum oris. The disease attacked the left cheek and when the slough separated, an opening was left as large as a silver dollar, exposing the teeth and rendering feeding difficult. There was a high fever, typhoidal delerium and great prostration.

The wound was cauterized and disinfected, and heroic measures to feed and stimulate the patient, but the symptoms grew worse and little hope of recovery was given to the relatives.

Finally, as a last resort, I began the use of protonuclein, giving the tablets internally and dusting the powder on the wound. An immediate improvement followed, and after a long and trying convalescence the patient was allowed to return home.

A year later she returned to the hospital to have a plastic operation done to lessen the deformity of the scar, and when she first entered my office I scarcely recognized the healthy, vigorous woman as my former tuberculos patient. The enlarged cervical glands had disappeared, her lungs were clear, her cough was gone. She had been cured of tuberculosis by the attack of cancrum oris. I have no explanation to offer for the result, but trust the clinical fact may prove of interest to the pathologist.